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# THE *Demand and Price* SITUATION

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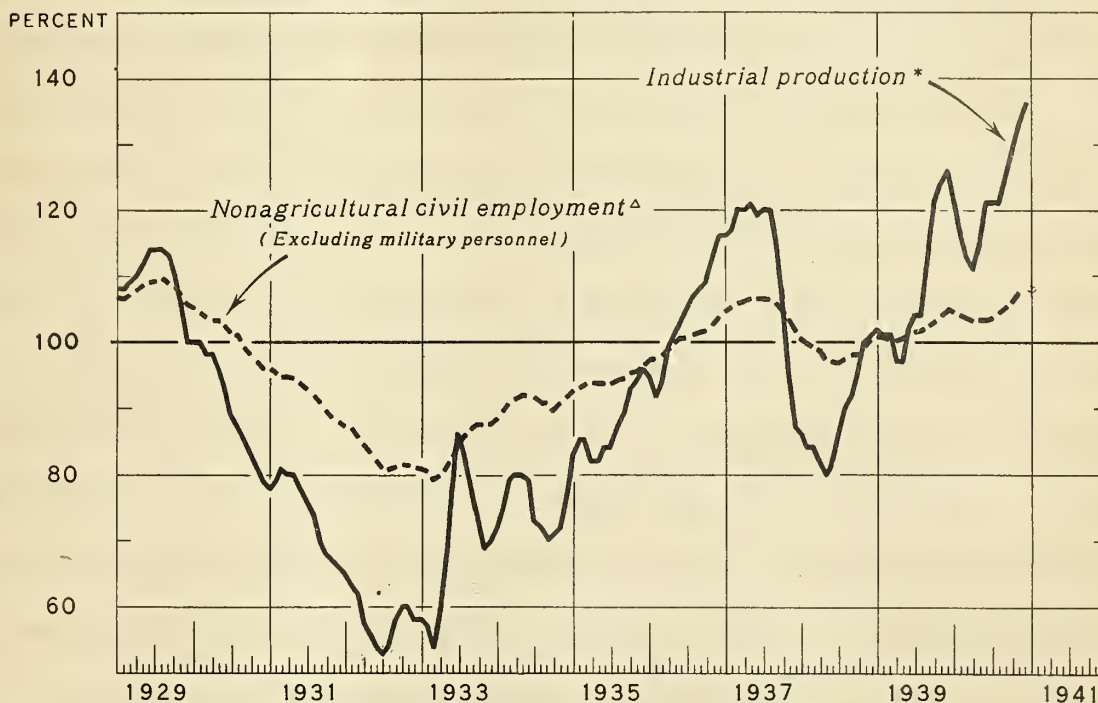
WASHINGTON, D.C.

BAE

JAN 1 1941

## INDUSTRIAL PRODUCTION AND NONAGRICULTURAL CIVIL EMPLOYMENT, UNITED STATES, 1929-40

INDEX NUMBERS (1935-39=100) ADJUSTED FOR SEASONAL VARIATION



\*DATA FROM BOARD OF GOVERNORS OF FEDERAL RESERVE SYSTEM  
<sup>Δ</sup>BASED ON DATA FROM BUREAU OF LABOR STATISTICS

U. S. DEPARTMENT OF AGRICULTURE

NEG. 38888 BUREAU OF AGRICULTURAL ECONOMICS

NONAGRICULTURAL EMPLOYMENT DOES NOT FLUCTUATE AS MUCH AS INDUSTRIAL PRODUCTION. THE REASON IS THAT THE EFFICIENCY OF LABOR UTILIZATION AND NUMBER OF HOURS WORKED PER EMPLOYEE VARY DIRECTLY WITH PLANT OUTPUT, AND FLUCTUATIONS OF EMPLOYMENT IN THE DISTRIBUTION AND SERVICE OCCUPATIONS ARE NOT AS GREAT AS IN PRIMARY OCCUPATIONS. DESPITE AN INCREASING PROPORTION OF EMPLOYMENT IN DISTRIBUTION AND SERVICE LINES THERE IS AN UPWARD TREND IN PRODUCTION RELATIVE TO EMPLOYMENT. THIS IS DUE PARTLY TO TECHNOLOGICAL DEVELOPMENTS WHICH RESULT IN INCREASED OUTPUT PER EMPLOYEE DESPITE A GRADUAL SHORTENING OF THE WORK WEEK, AND PARTLY TO CHANGES IN THE CHARACTER OF INDUSTRIAL PRODUCTION. MANY OF THE NEW INDUSTRIES UTILIZE MORE CAPITAL IN RELATION TO LABOR THAN DO SOME OF THE OLD ESTABLISHED ONES.

## SUMMARY

Improvement in the domestic demand for farm products is becoming increasingly apparent. Despite the virtual loss of export markets and a 1940 volume of agricultural production equal to or in excess of that of any previous year, the index of prices received by farmers in December was 5 percent higher than a year earlier and a further advance is indicated for this month. Prospective additional increases in consumer income are expected to result in a continuation of the improvement in domestic demand for farm products. Costs of farm production also are expected to rise.

Although the present high rate of industrial operations will make difficult the attainment of full seasonal gains for the next few months, intensification of efforts to rush production of war implements for export and for equipment of our own expanded military machine probably will result in a further increase in defense building operations and later a substantial further increase in industrial output. Defense expenditures have now reached a rate of approximately 500 million dollars per month as compared with 153 million dollars in June of last year. They would have to average double the present rate in the 1941-42 fiscal year to reach the figure presented in the President's budget message to Congress earlier this month.

Defense activities are already resulting in a rapid decrease in unemployment. On the basis of preliminary 1940 census data there apparently were about 8 million persons either without work or on relief jobs in late March 1940. It is estimated that the number unemployed or working on relief jobs in November was about 2 million less than in March, although a part of this decrease was seasonal.

Exports of agricultural commodities continue on a restricted basis, the value having averaged less than 4 percent as large as farm income from marketings during the 6 months ending last November, compared with over 11 percent in the 6 months immediately preceding. It is possible that a shortage of shipping and the advantages of the short North Atlantic route to Europe, together with other developments, will eventually bring about a material increase in agricultural exports, but the near-term outlook is for little if any improvement in exports of domestic farm products.

Wholesale commodity prices have been rising since last August and by December were higher than at any time since the outbreak of war in Europe. The general strength in wholesale commodity prices since last August reflects the improvement in basic demand conditions. Further gains appear probable, although there is little basis for expecting a price rise of inflationary proportions in the near future.

Farm income in December apparently declined less than the usual seasonal amount; marketings continued large, and there was a further increase in the index of prices received by farmers. Improvement in the domestic demand for farm products accompanying the recent substantial increases in industrial output and consumer income, together with the effect of national farm programs in stabilizing prices of basic farm commodities, has been sufficient to more than offset the effects of greatly reduced exports and has resulted in an increase in the general level of prices received by farmers and in cash income from farm marketings.

-- January 15, 1941

The situation by commodities is as follows:

Wheat: Domestic wheat prices are slightly higher than a month ago, and close to the peak of the season. Price fluctuations have been small, and the market continues to be stabilized by the effect of the loan program.



- Cotton: The average price of spot cotton, Middling 15/16", in the 10 markets was 10.13 cents per pound on January 13 compared with 9.86 a month earlier and 10.80 a year ago. Cotton consumption in December reached an all-time high of 775,000 bales and the seasonally adjusted index of cotton consumption rose to 145 percent of the 1935-39 average compared with the previous high of 135 reached in the preceding month. Mill activity is continuing at about the same level in the United Kingdom as in recent weeks. In Japan, where stocks of textiles are reported to be about 10 times as large as current monthly exports, mill activity is still being gradually reduced. Exports of American cotton totaled 107,000 bales during December, raising the total for the season to 603,000 bales. These figures are 13 and 19 percent, respectively, of the corresponding 1939 figure.
- Feed grains: Stocks of corn on January 1 totaled 2,005,000,000 bushels, 438,000,000 bushels of which were sealed or held by the Government. Disappearance of corn is expected to be considerably smaller during the period January-September 1941 than in this period of 1940, and another record carry-over is in prospect for next October 1. Corn prices advanced about 4 cents per bushel during the past month, and oats and barley prices advanced slightly.
- Hogs: Hog production in 1940 was not so large as a year earlier. The 1940 pig crop totaled 77.0 million head, compared with the record crop of 85.9 million head in 1939. Present indications are that a further reduction will occur in this year's spring crop. Hog prices have risen sharply in the past few weeks, as the weekly rate of hog marketings decreased from the high level of early December.
- Beef cattle: Slaughter supplies of grain-fed cattle will be larger next spring and summer than a year earlier, as a result of the 11 percent more cattle on feed January 1 this year than last. Prices of slaughter cattle strengthened materially in late December, and so far in January the advance has been well maintained. Inspected cattle slaughter in the calendar year 1940 totaled about 3 percent larger than in 1939.
- Lambs: Slaughter supplies of lambs probably will be larger than a year earlier during the next 3 or 4 months, chiefly as a result of the 6 percent more lambs on feed January 1 this year than last. Lamb prices advanced sharply in late December and early January. Inspected sheep and lamb slaughter during 1940 totaled 1 percent larger than in 1939.
- Wool: It is expected that wool prices in the United States will average higher this spring and summer than they did a year earlier. Since last spring, however, wool prices have advanced materially and advances from present levels

are likely to be moderate. Wool supplies in foreign countries, available for shipment to the United States, are relatively large.

- Butter: Butter prices declined sharply after reaching a 3-year high in early December, and in early January were somewhat lower than a year earlier. During the remainder of the feeding period, however, butter prices probably will average as high or higher than in the same period of 1940. The high buying power of consumers is expected to more than offset the effect of higher production on prices.
- Poultry and eggs: Receipts of dressed poultry and eggs at principal markets in early January were smaller than a year earlier. Although storage stocks of dressed poultry now are the largest on record, total supplies for the first half of the year are expected to be smaller than in the first half of 1940; supplies of eggs also are expected to be smaller. With larger consumer incomes the prices of both products are expected to average higher than a year earlier during the next several months.
- Oilseeds, fats and oils: Prices of most fats and oils are expected to rise moderately in 1941 and possibly more in 1942. The principal factors bringing about this rise will be improvement in industrial activity and in consumers' income, resulting in large part from increased defense expenditures, particularly in the second half of 1941. The general level of fats and oils prices in 1940 was 5 percent higher than in 1939, but was 36 percent below the 1924-29 average.
- Fruit: Indications are that the production of 15 of the important fruits in 1940 will be about 13.7 million tons, compared with 14.4 million tons in 1939, and the 1934-38 average of 12.6 million tons. Large purchases of fresh fruit by the Surplus Marketing Administration, coupled with a smaller crop and increased consumers' income, have resulted in farm prices of most fruits averaging slightly to moderately higher than in 1939.
- Potatoes: Market prices of potatoes in early January, slightly lower than a month earlier and substantially lower than in early January 1940, reflected the unusually large supplies available and in prospect during the next several months.
- Truck crops: There was little change in the general level of truck crop prices during the last month, but the prospect is for increased marketing and lower prices during the next several months if weather conditions are favorable.

## DOMESTIC DEMAND

With industrial activity reaching new peaks each month of the final quarter of 1940 and the income of industrial workers the largest since 1929, improvement in the domestic demand for farm products is becoming increasingly apparent. Although agricultural production in 1940 was larger than in 1939 and as large as or larger than in any previous year, and despite the virtual loss of export markets for farm products, domestic demand had improved to such an extent by the end of 1940 that prices received by farmers averaged 5 percent higher than a year earlier, and were as high as at any time since the outbreak of war in Europe. A further price advance is indicated for January.

Ordinarily, industrial output increases by about 5 percent from January to May. The sharp rise of industrial activity since last August has brought many important industries to near capacity operation, so that attainment of full seasonal gains during the next few months will be difficult. This may result in some decline of seasonally corrected measures of industrial activity. However, the actual rate of operations in steel, in machine tools, and other important heavy goods industries producing for defense probably will expand further as capacity enlargement permits.

During the past month there has been an intensification of efforts to speed up armament production, including delegation of additional powers to defense authorities and announcement of plans for added material aid to nations resisting aggression. These actions may result in some further increases in defense construction activities in the near future, depending in part on possible changes in working hours and shifts. The maximum effects on productive activity, however, will come later as new plant capacity goes into operation.

Increasing emphasis on defense production is, directly or indirectly, in large part responsible for the recent improvement in conditions affecting the domestic demand for farm products. Defense jobs are furnishing work directly for a rapidly increasing number of men; this together with the indirect effects on employment in industries supplying defense materials, in construction of living quarters for defense workers and in numerous other nonagricultural occupations, has already been an important factor in lifting nonagricultural employment (excluding military) to the highest point since 1929. Further gains are in prospect. Including the expanded military personnel, there probably will be around 3 million more nonagricultural workers receiving regular incomes in 1941 than in 1929. The number of relief jobs in 1941 probably will average about 2 million, exclusive of students. This estimated expansion in employment of around 5 million persons, including civil, military, and relief workers, compared with 1929 is probably less than the increase in the working force of the nation since that year, an increase which has been estimated at 6 to 7 million. However, there probably will be at least 3 million more persons receiving regular assistance under social security and general relief programs in 1941 than in 1929.



Unemployment will not entirely disappear in 1941, but may average only about half as much as in 1940. Preliminary 1940 census data indicate that unemployment in late March was about 8 million, of which about 5 million had no jobs at all and about 3 million had relief jobs. Bureau estimates show about 2 million fewer unemployed in November 1940 than in March, this change reflecting partly the seasonal increase in employment. This would indicate total unemployment in November of about 6 million. Of these about 2 million had relief jobs on W.P.A. projects, in Civilian Conservation Corps camps, and on out-of-school youth projects.

The further increases in nonagricultural employment, payrolls, and other income payments which will accompany growing defense activities in 1941 are expected to result in national income payments about as large as those of 1929. In terms of real purchasing power such a total would be perhaps 10 to 15 percent higher than in 1929. Under these prospective conditions of employment and national income, the domestic demand for farm products should be sufficiently improved to result in the largest gross farm cash income from marketings since 1930, although the loss of export markets will prevent farm cash income plus benefit payments from rising as much as usual in relation to total income payments. The prospective rise in farm income will not result in a comparable gain in farm buying power because prices of goods and services which farmers buy will also increase.

#### EXPORT DEMAND

The export demand for United States farm products has continued at a low level since June 1940, the monthly value of agricultural exports from June to November 1940 inclusive having averaged about 29 million dollars. The value of farm product exports during this 6-month period was only 3.6 percent as large as farm cash income from marketings compared with 11.2 percent during the 6 months immediately preceding.

There is little prospect of any substantial increase in farm product exports in the near future. However, there are reports that the British blockade may be modified to permit shipments of selected foodstuffs to some areas of continental Europe; also there is the possibility that purchases of some United States farm products by the United Kingdom might be somewhat larger when dollar exchange is not so urgently needed for the purchase of implements of war, under the new methods of financing which are now being considered.

Competition for export markets between the United States and other areas producing surplus farm products remains acute, and the exchange situation continues to favor other non-Dominion markets than the United States. Dominion markets will continue to receive the bulk of British business unless new methods of financing procurement in this country or new shipping difficulties, forcing a greater reliance on the shorter North Atlantic routes, should develop.

The growing domestic demand for farm products is in part a reflection of the large exports of industrial products. This situation may be even more important in the future, and in any event is expected to continue to offset in some degree the effect of the war in reducing exports of domestic farm products.

## WHOLESALE PRICES

Wholesale commodity prices have been rising since last August, according to the various Bureau of Labor Statistics indexes.

The monthly and weekly wholesale commodity price indexes of the Bureau of Labor Statistics, which are based on prices of 887 individual commodities, have risen nearly 4 percent since last August and in December were higher than at any time since 1938. The daily index of the prices of 28 basic commodities has risen about 14 percent since the 1940 low point, but is still lower than in September 1939.

The recent strength in wholesale prices is due in part to: (1) increasing domestic and foreign defense needs; (2) increasing industrial and consumer demand for current consumption; (3) inventory building by business to avoid shortages as long as possible; (4) increasing wage costs resulting from higher rates and overtime pay.

Although supplies and potential supplies of most raw materials needed for defense and exports appear ample if these needs could be spread over a period of months, a concentration of demand such as has occurred recently for lumber may lead to temporary shortages. Lumber prices rose 24 percent from August to November 1940, although productive capacity of the industry on an annual basis appears to be far in excess of potential civil and military demands when spread out over a 12-month period. Similarly, domestic production of copper supplemented by readily available imports appears sufficient for all probable needs, but early this month for the first time the total of all bids submitted failed to equal the full amount of copper sought by the Navy. Such temporary shortages as these have a stimulating effect on the general level of commodity prices, as well as on the prices of the particular products directly concerned. They induce the further building of business inventories at a time when both immediate civil and military needs are expanding. A further stimulating effect of the rush to expand defense production comes through the influence of wage increases on cost of production.

The general strength in wholesale commodity prices since last August reflects the improvement in basic demand conditions. Further gains in the general level of wholesale prices appear probable in 1941, although there appears to be little reason for expecting a general price rise of inflationary proportions.

## PRICES RECEIVED AND PAID BY FARMERS

Although the general index of prices received by farmers rose to 101 percent of the 1910-14 average in December and may be even higher this month, the indexes of prices of several important groups of farm products are still well below the 1910-14 average. Recent strength in farm product prices is largely a reflection of improvement in domestic demand. The volume of farm production in 1940 was large and exports have been very small.

Substantial advances in prices received by farmers this month are indicated for meat animals and truck crops, whereas dairy and egg prices declined



seasonally. Small price advances are indicated for grains, potatoes, and cotton, and there was a seasonal rise in tobacco prices.

Prices received by farmers rose from 99 in November to 101 percent of the 1910-14 average in December, and in December were as high as at any time since the outbreak of war in Europe and 5 points higher than a year earlier. However, the ratio of prices received to prices paid by farmers in December was only 83 percent of the 1910-14 average. This was 2 points above November, 4 above December 1939, and as high as in any month since November 1937, but it appears likely that any further gains in the index of prices received by farmers will be offset, at least in part, by rising costs.

#### FARM INCOME

Sales of farm products in December continued relatively large, and with farm prices higher than in November, cash income from farm marketings made less than the usual seasonal decline. Government payments in December were smaller than in November and materially smaller than the 91 million dollars paid to farmers in December 1939. However, preliminary indications are that cash farm income including Government payments was somewhat larger than a year earlier as a result of the larger marketings and higher prices of farm products.

With a large portion of the 1940 cotton and wheat crops already sold or placed under loan and hog marketings from the 1940 spring pig crop having been unusually large from October to December, marketings of farm products in the first few months of 1941 may be smaller than usual. However, this will be at least partially offset by higher prices than a year earlier, so that farm income during the first few months of 1941 is likely to be at about the same level as in the corresponding months of 1940.

#### COTTON

The spot price of cotton continued to gain for the third successive month with Middling 15/16 inch in the 10 markets averaging 10.13 cents per pound on January 13 compared with 9.86 cents on December 14 and 9.27 cents on October 14, when prices were the lowest so far this season. On January 13 the price was  $2/3$  cent lower than a year earlier. All of the price gain between mid-December and January has been due to rising prices since Christmas.

The quantity of the 1940 crop going into the Government loan continued to increase during the past month - even though spot prices in the 10 markets averaged from about  $1/2$  to  $9/10$  cent per pound above the loan rate - and on January 6 totaled about 2.7 million bales. This made the total Government-owned and held stocks on that date slightly under 11 million bales.

Perhaps the most significant development in the past month was the consumption of 775,000 bales of cotton in December, nearly 100,000 bales more than in any December on record. This was the second largest quantity ever recorded for any month, being exceeded only by March 1936 when consumption totaled 777,000 bales. The seasonally adjusted index of cotton consumption for December

was 145 percent of the 1935-39 average compared with the previous high of 135 reached in November, with 126 in October, and with 128 in December 1939. Trade sources report that the loss of time at most mills was much less than usual over the holidays. Cotton consumption probably will continue at a record or near-record level for the next few months, since mills are well booked in advance even though sales of unfinished textiles lagged behind production for a number of weeks around the turn of the year.

Recent air raids in some of the principal textile manufacturing areas of England have damaged transportation and communication lines, according to trade reports, but apparently mill activity has been little affected. During the past month sales of textiles in the United Kingdom have included several large Government orders and a fairly active demand from the Dominions, South America, and other areas. In Japan, textile sales have been so small this season that, despite greatly curtailed mill activity, some reports indicate that total stocks may have accumulated to about 10 times current monthly textile exports.

The United States exported 107,000 bales of cotton during December, of which 40,000 went to Russia, 25,000 to Canada, 20,000 to the United Kingdom, 9,000 to Japan, 2,000 to China, and smaller quantities to several other areas. This raises the total for the season to date to 603,000 bales, of which 51 percent went to the United Kingdom, 23 percent to Russia, 13 percent to Canada, 5 percent to Japan, and 1 percent to China. Exports for December and the season to date were only 13 and 19 percent, respectively, of the corresponding 1939 figures. Not since 1868 have exports been so low for the first 5 months of any season.

#### WHEAT

Domestic wheat prices are slightly higher than a month ago, and about at the season peak to date. Prices of all classes and grades in six markets for the week ended January 11 averaged about 3 cents higher than for the week ended December 14. This was about the same as the high week ended November 23. Prices since January 11 have been slightly lower.

Price fluctuations have been small, the market continuing to be stabilized by the effect of the loan program in limiting the supply of free wheat. Warehouse loans, which were made for a period of 8 months, or not later than April 30, will begin expiring in February. However, it is to be expected that the market will not be oversupplied, because if prices are not above loan values plus costs growers will not sell their grain and pay their loans, the Government will take delivery at maturity of the loans. Moreover, the Commodity Credit Corporation announced that insofar as practical it will not sell any 1940 crop wheat that is in good condition except at prices at least at loan values plus charges. A small quantity can be disposed of in export channels and in relief distribution, and possibly to the Red Cross and the Federal Crop Insurance Corporation. On 1940 farm stored grain, an extension beyond the original loan period (which was for 10 months) will again be available in areas where it is known that the grain will store without deterioration.



The total quantity of 1940 crop under loan December 31, the closing date for the making of 1940 crop loans, was about 275 million bushels. About 10 million bushels of the 1939 crop were resealed on farms last year (the loans on which mature on April 30), making a total under loan of about 285 million bushels. Of this quantity a total of about 60 million bushels is on farms and about 225 million bushels in warehouses.

Wheat supplies in the United States for the current marketing year are now estimated at about 1.1 billion bushels, or about 100 million bushels above the supply a year earlier. This estimate is about 25 million bushels above that of a month ago, as a result of the upward crop revision made December 18. On the basis of estimated exports of about 20 million bushels and a domestic disappearance of 685 million bushels, there would be about 400 million bushels available for carry-over July 1, 1941, or upwards of 100 million bushels above the carry-over last July. An acreage increase of 5.6 percent and December 1 condition of 84 percent, which compares with the 1928-37 average of 79 percent, were indicated for winter wheat in the December report issued by the Crop Reporting Board. Moisture conditions in spring wheat States, particularly North Dakota, give promise also of a good spring wheat crop.

#### OILSEEDS, FATS AND OILS

Prices of most fats and oils are expected to rise moderately in 1941 and possibly more in 1942. The principal factors bringing about this rise will be improvement in industrial activity and in consumer income, resulting in large part from increased defense expenditures, particularly in the second half of 1941. Lard, tallow, and grease prices are likely to advance relatively more than prices of other fats, because of prospective changes in the domestic supply situation. Total supplies of domestically-produced fats are not expected to change greatly in the next 2 years.

With reduced hog marketings, lard and grease production will be substantially smaller in 1941 than in 1940. The pig crop in 1940 was estimated to be 10 percent smaller than in 1939, and the pig crop probably will be further reduced this year. Increased production of vegetable and marine oils, however, is likely to offset most of the decrease in lard and grease output.

Average prices of fats, oils, and oilseeds showed little change from November to December. For 1940 as a whole, the general level of fats-and-oils prices was 5 percent higher than in 1939, but was 36 percent below the 1924-29 average. Prices of linseed oil, butter, marine oils, and many of the imported oils were moderately to sharply higher in 1940 than in 1939, reflecting improved domestic demand conditions and difficulties in obtaining supplies of oils from Europe and China. On the other hand, prices of lard, tallow, greases, most domestic vegetable oils, and oils imported from the Philippines and the East Indies declined to the lowest levels in 6 or 7 years. The large domestic output of fats and oils in 1940 and the closing of many European markets to world trade were the factors primarily responsible for the downward movement in prices for these items.

## CORN AND OTHER FEED GRAINS

Cash corn prices advanced during the past month, and for the week ended January 11 the price of No. 3 Yellow corn at Chicago was 64 cents per bushel, 3 cents higher than for the week ended December 21, and 6 cents higher than a year earlier. During the past month oats and barley prices advanced slightly. The 1940 corn crop was of a much lower quality than the 1939 crop, and there is a much wider spread between prices of better and lower grades than a year ago. During 1941 prices will be supported by the 1940 loan program and by a higher level of business activity.

Total stocks of corn on January 1, 1941, amounted to 2,005,000,000 bushels. Excluding 438,000,000 bushels sealed or held by the Government, January 1 stocks were smaller than corresponding supplies of the past 3 years, but 5 percent above the 1929-33 average. Stocks on January 1, 1940, totaled 2,050,000,000 bushels, of which about 270,000,000 bushels were sealed or held by the Government. Sealing of corn during the next 2 or 3 months is expected to be smaller than in the corresponding period last year, and the total quantity of unsealed corn available during the first half of 1941 may be about as large as the total quantity available in the first half of 1940.

Disappearance of corn as grain during the period October-December totaled 866,000,000 bushels compared with 876,000,000 bushels in the corresponding period of 1939. Disappearance of corn probably will be considerably smaller during the first 9 months of 1941 than in the same period of 1940, and the carry-over of corn on October 1, 1941, is expected to be somewhat larger than the record carry-over on October 1, 1940. Farm and commercial stocks of oats on January 1 totaled 799,000,000 bushels compared with 606,000,000 bushels last year and a 1929-33 average of 738,000,000 bushels. The disappearance of oats during the 3 months October-December was about 237,000,000 bushels, or 63,000,000 bushels more than in the corresponding period of 1939.

## HOGS

Hog production in 1940 was not so large as a year earlier. The combined 1940 spring and fall pig crop totaled 77.0 million head, compared with the record crop of 85.9 million head in 1939. This reduction in the number of pigs raised in 1940 reflects the unfavorable ratio of hog prices to corn prices which has prevailed since late 1939. Unless there is an exceptionally large increase in this year's fall pig crop, present indications are that the total number of pigs raised during 1941 will be smaller than in 1940. On the basis of breeding intentions reported by farmers about December 1, it was estimated that the number of sows to farrow in the spring of 1941 will be reduced by about 14 percent under that of 1940. If this indicated reduction materializes it would be necessary for the 1941 fall crop to equal about 34 million head for the total number of pigs raised in 1941 to equal the number raised in 1940. With prospects for considerable improvement in the hog-corn ratio in the next few months it is possible that the 1941 fall crop will exceed the 1940 fall crop of 28.6 million head. It is not likely, however, that the total number of pigs raised in 1941 will be as large as the number raised last year.



Marketings of hogs were reduced sharply in late December; but total slaughter supplies for the month were much larger than a year earlier. Slaughter of hogs under Federal inspection during December totaled 6,063,000 head, 12 percent more than in November and 16 percent more than in December last year. Despite a reduction of about 9 percent in the 1940 spring pig crop, inspected hog slaughter in the first 3 months (October-December) of the 1940-41 marketing year totaled close to 16 million head, 20 percent more than a year earlier and the largest inspected slaughter on record for the period. This indicates a much earlier than usual marketing of the 1940 spring crop, and a greater than usual reduction in market supplies of hogs after January 1. In the remaining 9 months of the 1940-41 marketing year (January-September) slaughter supplies of hogs are expected to total around 18 percent smaller than in the last three quarters of the 1939-40 season. The smaller slaughter supplies and the improvement in consumer demand for meats now taking place are expected to result in materially higher hog prices this year than last.

Hog prices strengthened materially during late December and in early January as the weekly rate of hog marketings was reduced from the high levels of preceding weeks. The average price of butcher hogs at Chicago for the week ended January 4 was \$7.35, compared with \$6.15 in early December and \$5.50 in the first week of 1940. Corn prices advanced moderately in early January so that the rise in hog prices has not been fully reflected in improvement in the hog-corn price ratio. The ratio of the average price of hogs to the price of No. 3 Yellow corn at Chicago for the week ended January 3 was 11.3, which is higher than in most weeks of 1940.

#### CATTLE

Slaughter supplies of grain-fed cattle in the spring and summer of 1941 will be larger than in the corresponding period of 1940. According to information recently released by the Agricultural Marketing Service, the number of cattle on feed in the Corn Belt on January 1, 1941 was 11 percent larger than a year earlier. There also was an increase of about 10 percent over January 1, 1940 in the number on feed in the 13 Western States, including Texas and Oklahoma. Most of the increase in the Corn Belt was in the States west of the Mississippi River. Marketing intentions reported by Corn Belt cattle feeders indicate that most of the increase in slaughter supplies of fed cattle resulting from the increased feeding operations will occur in the late spring and summer of 1941. Supplies in the first 4 months of the year may be only moderately larger than in the corresponding period of 1940. Prices of feeder cattle during the past fall and early winter have averaged around 50-75 cents higher than in the last 4 months of 1939. However, prices of fed cattle in the first half of 1941 are expected to average materially higher than in the first half of 1940.

Prices of all grades of slaughter cattle strengthened materially in late December, and so far in January these advances have been well maintained. The average price of good grade beef steers at Chicago for the week ended January 11 was \$12.20, around 60 cents higher than a month earlier and \$2.70 higher than in the first week of January 1940. The upward trend in cattle prices during 1940 was less pronounced for the lower

grades than the upper grades. Prices of common grade steers and of cows in early January were only about 50 cents higher than a year earlier.

Marketings of slaughter cattle and calves decreased seasonally during December, but continued larger than a year earlier. Inspected cattle slaughter for the month totaled 858,000 head, 3 percent less than in November, but 11 percent more than in December 1939. Inspected cattle slaughter for the entire year totaled 9,756,000 head, 3 percent more than in 1939. Information available for the first 11 months of 1940 indicates that total marketings of cows and heifers for slaughter during 1940 were smaller than a year earlier, as farmers and ranchers continued to hold back breeding stock for herd building purposes. Slaughter of steers, however, was around 7-8 percent larger than in 1939, and larger than in any of the past 20 years.

Inspected calf slaughter in December totaled 437,000 head, 6 percent less than in November but 15 percent more than in December 1939. Calf slaughter for the entire year 1940 totaled about 2 percent larger than in 1939.

#### LAMBS

Slaughter supplies of sheep and lambs during the remainder of the 1940-41 fed-lamb marketing season (through April) probably will be larger than in the corresponding period of 1940, chiefly as a result of the 6 percent more sheep and lambs on feed January 1 this year than last. Most of the increase in the number of sheep and lambs on feed January 1, 1941 over a year earlier was in the Corn Belt States. The number on feed in the Western sheep States was a little larger than a year earlier. A decrease of 10 percent in Colorado was a little more than offset by increases in Texas and several other Western States. Lambs on feed are reported not to have made as rapid gains this winter as last, due to less favorable weather conditions prior to January 1 than a year earlier. The effects upon prices of the larger supplies of lambs during the next 3 or 4 months than a year earlier will be more than offset by stronger consumer demand for meats and higher prices for wool in the first part of 1941 than in the corresponding period of 1940.

Prices of slaughter lambs advanced sharply in late December and in early January, along with the rise in prices of other livestock. The average price of good and choice grade slaughter lambs at Chicago for the week ended January 11 was \$10.00, around 60 cents higher than a month earlier and \$1.00 higher than in the first week of January 1940. Prices of slaughter ewes have risen seasonally since midsummer. In early January the average price of good and choice grade ewes at Chicago of around \$5.00 was \$2.00 higher than in late July and about 70 cents higher than in early January 1940.

Marketings of sheep and lambs decreased seasonally in December. Inspected slaughter for the month totaled 1,416,000 head, 3 percent less than in November but 2 percent more than in December 1939. Inspected slaughter for the entire 12 months of 1940 totaled 17,351,000 head, 1 percent more than in the calendar year 1939.



## WOOL

Sales of domestic wool at Boston were small in December and the early part of January. Prices did not change materially. The limited offerings of fine and 1/2 blood domestic wools and the relatively lower prices of foreign wools which are now arriving in quantity were important factors restricting the sale of domestic wools.

Imports of wool probably will continue large in the first quarter of 1941. But with a high level of wool consumption in prospect in the next several months the carry-over of wool in the United States at the beginning of the new marketing season (April 1, 1941) is likely to be relatively small.

Mill consumption of wool in the United States in 1941 will be larger than in 1940, with most of the increase in the first half of the year. This will be a strong supporting factor to domestic wool prices. Prices in this country, however, will be affected to a considerable extent by prices of foreign wool since the United States is importing wool in large quantities. Wool produced in Australia, New Zealand, and the Union of South Africa (3 of the 5 major wool exporting countries) is under control of the British Government and is being sold at prices fixed by that Government. In the past year, the British Wool Control has followed a policy of maintaining a relatively high level of prices for wool released for export to other countries. In view of these considerations, it is expected that wool prices in the United States will average higher this spring and summer than they did a year earlier.

Since last spring wool prices have advanced materially, and even maintenance of the current level of prices would mean higher average prices for the 1941 domestic clip than for the 1940 clip. Advances in wool prices from present levels are likely to be moderate, despite the prospects for a strong domestic demand. Wool supplies in foreign countries available for shipment to the United States are relatively large.

The South American wool markets were moderately active in December and further price advances were reported on fine grades of wool. The United States has been the principal buyer in South American markets in the new season which opened October 1. Of a total of 57 million pounds of wool exported from Argentina and Uruguay in October and November, 54 million pounds were shipped to the United States.

## BUTTER

Butter prices reached a 3-year high in early December and then declined sharply. There is generally a break in butter prices in late December or early January shortly after the seasonal increase in production gets under way. This year the decline was relatively large. Butter prices had advanced to a high level in December and there was a marked increase in butter production. Even though butter prices in early January were less than a year earlier, it seems probable that prices during the remainder of the feeding period will average as high as in the same period of 1940, if not higher. The effect of the higher purchasing power of consumers is expected to more than offset the effect of higher production on butter prices.

Butter production in November was 4 percent higher than a year earlier and the second highest on record for the month. Weekly reports of production indicate that there has been a marked increase since November and that it is decidedly higher than a year ago. Butter production during the remainder of the feeding period is expected to be at record levels for that season.

While butter production has been high, consumption has also been high and stocks of butter are below average for this time of the year. The changes in consumption and retail prices indicate that consumer expenditures for butter in November were about 10 percent higher than in November 1939. After allowing for seasonal changes consumer expenditures in November were higher than in October and decidedly higher than in the past summer. The improvement in consumer income is being reflected in the demand for butter. Consumer expenditures for butter in 1941 are expected to be the highest in recent years.

#### POULTRY AND EGGS

Farm marketings of poultry are expected to be considerably smaller than a year earlier during the next several months, but receipts at principal markets may be little different from those in early 1940 since there again will be heavy inter-market movements of storage poultry. Storage stocks of poultry now are the largest on record. Despite the smaller hatch in 1940 than in 1939 receipts of dressed poultry at principal markets in the last half of the year were larger than a year earlier. These larger receipts in the fall months of 1940 appear to have been the result of heavy marketings of fowl and earlier than usual marketings of young chickens, while the larger receipts in the last few weeks of the year probably were due to larger receipts of turkeys.

The average price received by farmers for chickens in mid-December was about 1-1/4 cents higher than a year earlier and only about 1/2 cent below the 10-year (1929-38) average price for that date. Wholesale prices for chickens have advanced somewhat in recent weeks and chicken prices in general are expected to average higher than a year earlier during the next few months because of the smaller supplies and stronger consumer demand. For the first time in nearly 2 years turkey prices are higher than a year earlier and may continue above prices of last year through 1941.

Although the average rate of lay per hen on January 1 was slightly higher than a year earlier, total production now is a little smaller because of the fewer layers on farms. This smaller production, compared to a year earlier, is being reflected in lighter receipts at principal markets and in a larger out-of-storage movement for shell eggs than in early 1940.

Egg prices have declined considerably since the contraseasonal increase from mid-November to mid-December and egg prices now are about the same as in January 1940. Farm prices for eggs are expected to average higher this year than last because of the prospective smaller supplies for most of the year and the stronger consumer demand.



## POTATOES AND SWEETPOTATOES

Market prices of potatoes in early January averaged slightly below those of a month earlier, an indication that marketings were slightly larger than usual for this time of the year. Because of a large late production in 1940, the stored supply this year is considerably larger than that of a year ago. It is likely that January 1, 1941 stocks totaled close to 115 million bushels compared with 103 million a year earlier and 102 million, the 10-year 1930-39 average January 1 stocks. With this large storage supply and prospects of larger early crops (the fall and winter new crop being indicated at 1,742,000 bushels or 600,000 more than in 1940), the prospect is that potato prices will continue at about present levels during the next several months.

Recent reports indicate that the acreage intended to be planted this season in the first section of early States, North Florida and the lower valley area of Texas, is slightly larger than the acreage planted in 1940.

Sweetpotato prices continued to rise more than seasonally during December as marketings of the relatively short storage supplies were smaller than normal. The small crop produced in 1940 in the Atlantic Coast and South Central groups of States indicates that present storage holdings are substantially below those of a year earlier. This supply situation suggests that the price rise during the remainder of the marketing season will continue to be greater than normal.

## TRUCK CROPS

Market prices of truck crops in general during early January were about the same as those of a month and of a year earlier, with about an equal number of items showing advances and declines. As compared with a month ago, there were substantial advances in the market price of artichokes, snap beans, Brussel sprouts, carrots, escarole, green peas, peppers, and tomatoes, but there were important declines in the prices of lima beans, beets, broccoli, cauliflower, eggplant, endive, and lettuce. These differences in price movements were largely the result of changes in the market supply of the various vegetables.

Heavy rains in late December, extending throughout the important winter vegetable producing area of the South and into California, retarded the development of some truck crops and disrupted marketings. It is probable, however, that the much needed moisture will prove beneficial in the long run, and that the production of many crops will be increased. Favorable weather during the next few weeks probably will result in increased marketings. For the late winter and early spring, larger crops than were available a year earlier are in prospect for artichokes, snap beans, beets, carrots, cauliflower, eggplant, kale, lettuce, onions, peppers, spinach, and tomatoes. The supply of early cabbage, celery, and cucumbers probably will be slightly smaller. A widespread freeze early in 1940 sharply curtailed truck crop production in the South and resulted in relatively high prices during most of the late winter and spring. Unless weather conditions are again unfavorable, truck crop prices during the early part of this year are likely to average substantially below those of early 1940.

## FRUITS

Indications are that production of the 15 important fruits in the 1940-41 season will be about 13.7 million tons compared with 14.4 million tons in 1939, and the 1934-38 average of 12.6 million tons.

Although the fruit crop this year is smaller than in 1939-40, the virtual loss of the export market made it advisable for the Surplus Marketing Administration to set up purchasing programs for certain fruits (apples, pears, peaches, prunes, raisins, and citrus). The intent was to purchase quantities of these fruits approximately equal to the amounts that would have been exported under normal conditions. Large purchases of fresh fruit by the Administration, coupled with a smaller crop and increased consumers' income, have resulted in farm prices of most fruits averaging slightly to moderately higher than a year earlier. It is anticipated that this spread will increase as the effect of increased consumers' income on fruit prices becomes more marked.

The average farm price of apples for the country as a whole increased from 75 cents on November 15 to 86 cents on December 15. The price increase was greatest in the Pacific States where the December 15 price was 17 cents higher than that of November 15. This increase was partly seasonal in character, and partly the result of increased consumers' income in previous months. The out of storage movement of apples, during December was approximately 5.3 million bushels compared with 4.8 million bushels during December 1939. Cold storage stocks on January 1 totaled 28.8 million bushels.

The January 1 estimate of total orange and grapefruit production was 4.7 million tons compared with 4.3 million tons in 1939. Florida orange and grapefruit production estimates have been reduced 14 percent and 9 percent respectively since November 1. These reductions were largely due to damage from low temperatures during November, and to retarded sizing and excessive dropping of fruit caused by inadequate rainfall during the fall months.

Auction prices of early and mid-season Florida and California oranges for the week ended January 3 averaged considerably above those a year earlier. Auction prices at New York of Texas grapefruit, which declined seasonally from the middle of November to the latter part of December, rose sharply in the week ended January 3 as a result of considerable wind damage in Texas. The extent of the damage is not known at this time.



## RELATIVE EFFECTS ON INDUSTRIAL PRODUCTION OF DEFENSE PLANT CONSTRUCTION AND OUTPUT

The first phase of the national defense effort is well advanced. In response to initial defense needs, represented by the multi-billion dollar backlog of orders already on hand, numerous factories are being rushed to completion. On the basis of defense appropriations and authorizations totaling nearly 18 billion dollars, which were made during the first half of the present fiscal year, orders and allocations have now been placed to the amount of about 12 billion dollars. Although actual defense expenditures from these funds thus far are estimated to have been only 10 percent of the total, the direct effect on productive activity has been considerable. Factory building operations are proceeding at a feverish rate, production in existing factories working on defense orders is being expanded, and housing facilities for the increased Army personnel and for defense workers are being rushed to completion.

The indirect effects of the defense program are also important. The increases in employment and payrolls which are accompanying defense activities are bringing an improved consumer demand for farm products as well as for automobiles, residences, and other consumption goods. Furthermore, prospective price increases and future difficulties in obtaining deliveries of some industrial products are causing business men to lay in supplies before the more active phase of defense production arrives. As a result of these developments, and of increased industrial exports to Great Britain, industrial production rose between April (just before the German invasion of the Low Countries) and December 1940 by more than 22 percent to a peak 8 percent above any previous month, according to the Federal Reserve index.

Gradually during 1941 some of the important defense industries will pass from the preparatory expansion to the active production phase. The important question arises as to what effect the passing from this initial stage of plant expansion to large-scale production of defense equipment will have on general industrial activity. This question involves numerous considerations, not the least of which is the relation of the value of output of a completed factory to the value of the factory itself. In this analysis it has been assumed that output in the plants which are being rushed to completion will not be limited by lack of orders for a year or longer - an assumption which is hardly open to question since orders already placed are in many instances in excess of estimated annual capacity.

On the basis of data contained in the Census of Manufactures for 1929, in Statistics of Income for that year, and in the National Bureau of Economic Research study on "Capital Consumption and Adjustment," by Solomon Fabricant, it is estimated that the net value of factory output in 1929 was 1.7 times as great as net plant values based on estimated costs of reproduction. For metals and chemicals, the groups most important in defense, the ratios were 1.6 and 1.2 to 1 respectively. More census details useful in comparing output with plant values are available for 1929 than for any other year; also 1929 was a year of nearly full production in many lines, a condition similar in that respect to what is expected during the period of active defense production which lies ahead.

The ratio of the annual value of output to plant value should for purposes of this discussion be adjusted to allow for the time required to construct the plant. This can be done only roughly. Numerous projects for construction of plants for the production of heavy defense equipment, announced during the last half of 1940, are expected to be completed in periods ranging mostly from 6 to 9 months, but some are expected to take longer. Apparently under stress plants of the type needed for defense production can for the most part be completed in something less than a year, perhaps in 9 or 10 months as a rough average. Allowing for this, the ratios of value of output to the value of plant during a period of time equal to that needed in building the plant would have been about 1.3 for the metals group in 1929.

As a check on this rough over-all computation for 1929, similar estimates have been made on the basis of several recently announced projects, all of which are in the metals and metals products group of industries. These computations indicate that the net value of output over a period of time equal to that expected to be used in construction of the producing facilities will range from approximately 1 to over 3 times the cost of constructing and equipping the plants, the arithmetical average of the estimated ratios being 1.7 to 1.

Thus it appears, both on the basis of the over-all estimates for 1929 and those for recently announced defense projects, that the net value of output will exceed the value of plant. This suggests that industrial output is likely to be further stimulated by the second phase of the defense program - large scale production of defense equipment in plants built during the preparatory phase. It is hardly necessary to state that there will be no clear cut time at which the defense program passes from the first to the second stages, as previously defined. Rather, there will be a dovetailing of these stages. The plant construction stage will probably continue to dominate through most or all of 1941 (or even longer should future developments necessitate a still larger defense effort than is now contemplated), taking second place only gradually to the production in completed new factories.

If it may be assumed that the net value of output from a factory built for defense production will be perhaps 1.5 times the cost or replacement value of the plant (i.e., output during a period of time equivalent to that used in constructing the plant) for as long as intensive production for defense is required, as is suggested by the results of computations previously presented, it seems rather certain that total industrial activity will be stimulated even more in the second stage (production) of the defense effort than by the first (plant construction). However, if facilities in previously existing plants engaged in furnishing materials for defense were insufficient to furnish the added military needs without some curtailment of deliveries previously being made on account of civil requirements, there would be an offset, in part, to the added stimulation to industry which might otherwise be expected. A shortage of labor, with the necessary training to fill both the new defense jobs and those connected with more normal peace time production, could have a similar offsetting effect. Likewise, the slowing up of forward buying by consumers (automobiles, etc.) and by business



men (steel, textiles, etc.) could offset a part of the added stimulus from the operation of newly constructed defense facilities. On the other hand, in absence of these or other possible retarding developments the effect on production of the completion of expansion programs might be even greater than is suggested by a comparison of possible net output with plant value, since any excess of output over value would also increase the demand on existing plants furnishing materials to the new plants.

There are, of course, many other factors in connection with national defense which will have a bearing on general business. The construction of barracks is now furnishing jobs to a large number of building workers; the peak of this activity probably has been reached already. Further construction of this nature would, of course, be needed if at some later date a further expansion than is now contemplated were made in Army personnel; otherwise, there will soon be a decline in jobs and payrolls for work of this nature.

Inventory policies have played an important role in recovery since mid-1940. A building up of inventories has added to the current demand for many industrial products, affecting production accordingly. No abandonment of this more liberal inventory policy is probable while commodity prices are firm or rising and it is known that civil needs will be subordinated to military whenever supplies are not sufficient for both. However, the points may well be reached within a few months when it will be neither practicable nor possible to continue to increase inventories in many lines. The retarding effect of this on further increases in industrial production could, however, be obscured by even greater increases in production against defense orders. These and many other developments will help to shape the course of production during the coming year, but increasing production of defense equipment is expected to be the decisive factor and probably will more than counter-balance any and all probable deterrents.

The expectation that later stages of the defense effort will exert an even greater over-all effect on industrial output than that of the plant-building stage may appear contradictory to the expectations of those who, despite abnormal characteristics of the period, lean heavily on trade cycle theories in their appraisal of the outlook. The present period of industrial expansion is quite different from one in which private investments in new plants continue to increase until some change in the outlook causes a slowing up and this (superimposed on the other retarding factors becoming apparent) helps to generate a relapse. At present, plants are being constructed to produce goods already on order or in definite prospect. This unusual situation promises to delay completion of the recovery phase of the production cycle - in fact, it has already prolonged the recovery in some lines. There will be no closing of the siphon which taps the reservoir of savings and bank credit as normally occurs when investment incentive wanes; rather deficit spending by the Federal Government, as defense production expands, will result in a continued, and for some time an increasing, flow from the savings and credit reservoirs.

## ECONOMIC TRENDS AFFECTING AGRICULTURE

INDEX NUMBERS: INDICATED BASE PERIOD = 100

YEAR AND MONTH	INDUS- TRIAL PRO- DUCTION <sup>1</sup>	CON- STRUC- TION CON- TRACTS AWARDED <sup>1</sup>	FAC- TORY EMPLOY- MENT <sup>2</sup>	FAC- TORY PAY- ROLLS <sup>2</sup>	INCOME OF IN- DUSTRIAL WORKERS <sup>3</sup>	VOLUME OF AGRI- CULTURAL EXPORTS <sup>4</sup>	WHOLE- SALE PRICES OF ALL COMMOD- ITIES <sup>5</sup>	RETAIL FOOD PRICES <sup>6</sup>	PRICES RE- CEIVED BY FARMERS <sup>7</sup>	PRICES PAID BY FARM- ERS	RATIO OF PRICES RECEIVED TO PRICES PAID	CASH INCOME FROM FARM MARK- ETINGS
<i>Base Period</i>	1935-39	1923-25	1923-25	1923-25	1924-29	1910-14	1910-14	1913	1910-14	1910-14	1910-14	192-21
1929	110	117	106	110	107	107	139	166	146	153	95	104
1930	91	92	92	89	88	82	126	158	126	145	87	83
1931	75	63	78	68	67	88	107	130	87	124	70	58
1932	58	28	66	47	46	94	95	108	65	107	61	44
1933	69	25	73	50	48	85	96	105	70	109	64	49
1934	75	32	86	64	61	66	109	117	90	123	73	58
1935	87	37	91	74	69	61	117	126	108	125	86	65
1936	103	55	99	86	80	55	118	127	114	124	92	76
1937	113	59	109	102	94	65	126	132	121	130	93	81
1938	88	64	90	78	73	75	115	122	95	122	78	71
1939	108	72	97	91	83	65	113	119	93	121	77	72
1939-												
Nov.	124	83	103	103	93	56	116	121	97	122	80	76
Dec.	126	86	105	104	93	75	116	119	96	122	79	79
1940-												
Jan.	122	75	104	102	93	105	116	119	99	122	81	79
Feb.	116	63	102	98	89	104	115	121	101	122	83	84
Mar.	113	62	101	95	87	68	114	120	97	123	79	76
Apr.	111	64	99	95	86	61	115	120	98	123	80	82
May	114	64	99	95	87	47	114	121	98	123	80	80
June	121	74	100	98	89	44	113	123	95	123	77	70
July	121	85	102	100	91	47	113	122	95	122	78	71
Aug.	121	90	104	104	95	32	113	121	96	122	79	71
Sept.	125	93	105	110	98	22	114	122	97	122	80	76
Oct.	129	95	108	113	100	27	115	120	99	122	81	80
Nov. <sup>9</sup>	133	110	110	116	102	22	116	120	99	122	81	79
Dec. <sup>9</sup>	136						117	122	101	122	83	

<sup>1</sup>Federal Reserve Board, adjusted for seasonal variation. Industrial production revised August 1940.<sup>2</sup>Bureau of Labor Statistics, adjusted for seasonal variation (employment adjusted by Federal Reserve and payroll Bureau of Agricultural Economics). Revised beginning January 1939.<sup>3</sup>Adjusted for seasonal variation. Includes factory, railroad, and mining employees.<sup>4</sup>Foreign Agricultural Relations, July 1909 - June 1914 = 100, adjusted for seasonal variation.<sup>5</sup>Bureau of Labor Statistics, 1926 = 100, converted to 1910 - 14 = 100.<sup>6</sup>Bureau of Labor Statistics, 1935 - 39 = 100, converted to 1913 = 100. Revised series beginning 1935.<sup>7</sup>August 1909 - July 1914 = 100.<sup>8</sup>Adjusted for seasonal variation. Revised March 1940.<sup>9</sup>Preliminary.

*Note:* In comparing trends between industrial production and industrial workers' income, as indicated by the index numbers, notice should be taken of the different base periods used, and of the fact that income of railroad workers, as well as incomes of mining and factory workers, is included in the index of industrial workers' income, whereas the industrial production index is based on mining and manufacturing only. Similar precautions are necessary in comparing trends between industrial production and factory employment and payrolls. Another consideration of importance is that the production index is based on volume, whereas the income indexes are affected by changes in rates as well as by time worked. In comparing monthly indexes it is important to keep in mind the fact that there is usually a time lag between changes in volume of production and similar changes in employment and in workers' income.